N311 Care Plan 1

Lakeview College of Nursing

Kayonna Pinto

Demographics (5 points)

Date of Admission 9/16/2019	**Patient Initials** B. S.	**Age** 66 years old	**Gender** Female
Race/Ethnicity White/Caucasian	**Occupation** Retired	**Marital Status** Widowed	**Allergies** NKA
Code Status DNR	**Height** 5’ 2”	**Weight** 130 lbs	

Medical History (5 Points)

Past Medical History: Squamous cell carcinoma of lung and Brain Metastasis. Hypercalcemia of malignancy. Adrenal adenoma. Emphysema, unspecified. Repeated falls. Amnesia, other. Iron deficiency anemia. Synthesis of inappropriate secretion of antidiuretic hormone. Secondary malignant neoplasm of RT.

Past Surgical History: IR US venous access (9/6/19), Port placement (9/6/19), Ultrasound core biopsy (8/2/19), Appendectomy (No date provided).

Family History: Patient’s maternal grandmother had renal cancer. Mother (deceased) was healthy. Father (deceased) had massive coronary at 72.

Social History (tobacco/alcohol/drugs): Smokes 2-5 cigarettes a day for 35 years. Does not use alcohol or recreational drugs.

Admission Assessment

Chief Complaint: Fall and Confusion

History of present Illness: Presents to hospital due to fall. Patient was found by cousin, whom she lives with, on the floor and covered in urine. This is out of character for the patient. Patient had day one of chemotherapy on 9/13/2019. Patient has experienced short term memory

impairment/loss and behavioral changes due to recent radiation. Patient reports no headaches, no nausea or vomiting, no vision changes, no abdominal pain, and no fever and/or chills.

Primary Diagnosis

Primary Diagnosis on Admission: Squamous cell carcinoma of lung

Secondary Diagnosis: Brain metastasis. Hypercalcemia of malignancy. Synthesis of inappropriate secretion of antidiuretic hormone. Secondary malignant neoplasm of RT. Emphysema, unspecified. Repeated falls. Amnesia, other. Iron deficiency anemia.

Pathophysiology of the Disease:

Pathogenesis of lung cancer involves not only an overload of carcinogens (from smoking or other environmental factors), but also a genetic predisposition. Smoking paralyzes the cilia that line the epithelium of the respiratory tract. The cilia become less efficient at removing carcinogens, so carcinogens begin to accumulate.

Squamous cell carcinoma of the lung is a type of Non-Small-Cell Lung Cancer (NSCLC). In comparison to Small-Cell Lung Cancer, NSCLC develops gradually, and over a longer period. Squamous cell carcinoma of the lung usually occurs as an erosion in a proximal bronchus in the central portion of the lung. Respiratory tract lesions like this undergo several genetic and structural changes. They being as an increased number of cells known as a “hyperplasia” and progress to an invasive, neoplastic/ cancerous mass. The rapid, unchecked growth is the result of tumor cell suppressor gene deactivation and oncogene activation. The cancer cells multiply rapidly and can trigger the development of new blood vessels (angiogenesis). The cancer leeches resources from surrounding tissue. As the lesion’s proliferation continues erosion of the epithelium is possible. The growth may also expand into the bronchial lumen or develop into a

solid mass within the lung. Squamous cell carcinoma of the lung is capable of metastasis. Once the growth reaches the pleural surface, it can spread to other lymph nodes. The bones and brain are common metastatic sites for lung cancer.

A paraneoplastic syndrome is defined as “an unexpected pathological disorder provoked by the presence of cancer in the body” (Capriotti & Frizzzell, 2020). One common paraneoplastic syndrome associated with lung cancer is hypercalcemia. The body produces a parathyroid-like hormone that stimulates bone breakdown, consequently raising the calcium concentrations in the blood. This phenomenon can be seen in a variety of cancers, although the reason is unclear. Inappropriate/excessive secretion of adrenocorticotropic hormone and/or antidiuretic hormone is another paraneoplastic syndrome frequently seen in lung cancer.

Pathophysiology References (2) (APA):

Capriotti, T. & Frizzell, J.P. (2020). *Pathophysiology: Introductory concepts and clinical perspectives.* (2nd ed.). F.A. Davis Company.

Pagana, K. D., Pagana, T. J., &Pagana, T.N. (2018). *Mosby’s Diagnostic and Laboratory Test Reference* (14th ed.). Mosby.

Laboratory Data
If laboratory data is unavailable, values will be assigned by the clinical instructor

CBC Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range (females)	Admission Value	Today's Value	Reason for Abnormal Value
RBC	**4.2 - 5.4**	3.84	4.36	Decreased levels of RBC’s can be the result of antineoplastic chemotherapy and pernicious anemia.

Hgb	**12.0-16.0**	12.1	13.6	Within the range of normal values.
Hct	**37.0 – 47.0 %**	37.0	42.4	Within the range of normal values.
Platelets	**150 – 400**	239	298	Within the range of normal values.
WBC	**5 – 10**	9.2	8.7	Within the range of normal values.
Neutrophils	**55 - 70%**	57.9	62.3	Within the range of normal values.
Lymphocytes	**20 - 40%**	28.8	24.5	Within the range of normal values.
Monocytes	**2 - 8%**	5.8	4.9	Within the range of normal values.
Eosinophils	**1 - 4%**	7.8	7.2	Increased levels of eosinophils are indicative of allergic reactions. Increased counts can also arise in parasitic infestations. Eosinophils do not respond to bacterial or viral infections.
Bands	**50 -65%**	N/A	N/A	N/A

Chemistry Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-	**136 - 145**	**145**	**145**	Within the range of normal values.
K+	**3.5 – 5.1**	**4.0**	**4.1**	Within the range of normal values.
Cl-	**98 - 106**	**108**	**103**	Hyperchloremia can occur in anemic patients.
CO2	**23 - 30**	**31**	**27**	Increased levels of carbon dioxide can be the result of aldosteronism
Glucose	**70 - 110**	**109**	**80**	Within the range of normal values.
BUN	**5 - 25**	**18**	**21**	Within the range of normal values.
Creatinine	**0.60 – 1.20**	**0.7**	**0.9**	Within the range of normal values.
Albumin	**3.5 – 5.7**	**3.0**	**4.2**	Hypoalbuminemia is most often the result of inflammatory responses.
Calcium	**9.0 – 10.5**	**9.5**	**9.7**	Within the range of normal values.

Mag	**1.6 – 2.6**	**N/A**	**N/A**	N/A
Phosphate	**3.0 – 4.5**	**N/A**	**N/A**	**N/A**
Bilirubin	**0.3 – 1.0**	**0.2**	**0.3**	Certain drugs may decrease levels of total bilirubin. Low bilirubin is not problematic.
Alk Phos	**30 - 120**	**64**	**89**	Within the range of normal values.

Urinalysis Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity	**Pale yellow and clear**	**N/A**	**N/A**	**N/A**
pH	**4.6 – 8.0**	**N/A**	**N/A**	**N/A**
Specific Gravity	**1.005 – 1.030**	**N/A**	**N/A**	**N/A**
Glucose	**Negative**	**N/A**	**N/A**	**N/A**
Protein	**0 – 8**	**N/A**	**N/A**	**N/A**
Ketones	**Negative**	**N/A**	**N/A**	**N/A**
WBC	**0 – 4**	**N/A**	**N/A**	**N/A**
RBC	**< 2**	**N/A**	**N/A**	**N/A**
Leukoesterase	**Negative**	**N/A**	**N/A**	**N/A**

Cultures Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings

Urine Culture	**Negative**	**N/A**	**N/A**	**N/A**
Blood Culture	**Negative**	**N/A**	**N/A**	**N/A**
Sputum Culture	**Negative**	**N/A**	**N/A**	**N/A**
Stool Culture	**Negative**	**N/A**	**N/A**	**N/A**

Lab Correlations Reference (APA):

Pagana, K. D., Pagana, T. J., &Pagana, T.N. (2018). *Mosby's Diagnostic and Laboratory Test Reference* (14th ed.). Mosby.

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

Low-dose helical CT Scan (Spiral CT scan): Used as a screening test for persons with risk factors (ex. Smokers age 40 and older).

Current Medications (10 points, 2 points per completed med)
5 <u>different</u> medications must be completed

Medications (5 required)

Brand/ Generic	Norvasc/ Amlodipine Besylate	Incruse Ellipta/ Umeclidinium	Prilosec/ Omeprazole	Keppra/ Levetiracetam	Cyanocobalamin/ Vitamin B12
Dose	5 mg/ tab	62.5 mcg (1 inhalation)	2, 20 mg/ tabs	1,000 mg/ tab	1000 mcg/mL
Frequency	Daily	Daily	Daily	BID	Once Monthly
Route	Oral	Oral	Oral	Oral	Intramuscular injection
Classification	Calcium Channel blocker	Anticholinergic	Proton-pump inhibitor	Pyrrolidine derivative	Vitamin
Mechanism	Binds to	Inhibits	Inhibits the	May protect	Once in the

of Action	dihydropyridine and non-dihydropyridine cell membrane receptor sites on myocardial and vascular smooth-muscle cells. Inhibits the influx of extracellular calcium ions, thus decreasing intracellular calcium. Amlodipine Besylate relaxes coronary tissues, decreases peripheral vascular resistance, and reduces blood pressure.	muscarinic M3 receptor in smooth muscle to cause bronchodilation. Umeclidinium relaxes muscles in the airways to improve breathing.	hydrogen potassium adenosine triphosphate enzyme system (proton pump). By irreversibly blocking the intracellular exchange of hydrogen, hydrochloric acid is not allowed to form. Omeprazole decreases the amount of acid produced in stomach	against secondary generalized seizure activity by preventing coordination of epileptiform burst firing. Levetiracetam does not seem to involve inhibitory and excitatory neurotransmissi on.	blood, vitamin B12 attaches to plasma protein. Most of the vitamin is stored in the liver, but some tissues have B12 binding proteins to which the B12 will attach to and be absorbed.
Reason Client Taking	Hypertension	Emphysema	GERD	Brain cancer	B12 deficiency, pernicious anemia
Contra-indications (2)	Hypersensitivity to amlodipine or its components	- Hypersensitivity to umeclidinium or its components - Severe hypersensitivity to milk proteins	- Concurrent therapy with rilpivirine-containing products - Hypersensitivity to omeprazole, substituted benzimidazoles, or their components	Hypersensitivity to levetiracetam or its components	- Sensitivity to cobalt and/or vitamin B12 - Incompatible with alkaline or strongly acidic solutions and oxidizing or reducing agents.
Side Effects/ Adverse Reactions (2)	- Hypotension - Arrhythmias	- Atrial fibrillation - Paradoxical bronchospasm	- *C. difficile*-associated diarrhea - Bronchospasms	- Suicidal ideation - Anaphylaxis	- Shortness of breath -Hypokalemia

Medications Reference (APA):

Jones & Bartlett Learning. (2020). *2021 Nurse's Drug Handbook* (19th ed.). Jones & Bartlett Learning.

Assessment

Physical Exam (18 points)

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	 Appears alert and orient x P, P, and T "Confused at times" No acute distress Well-groomed
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☐** **Type:**	 White skin color, Normal coloring Skin intact Skin warm to touch Skin turgor normal mobility No visible rashes, lesions, or bruises Braden score: 20 No drains present
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	 - Head and neck are symmetrical, trachea is midline without deviation. Thymus is not palpable. Bilateral carotid pulses are palpable. 2+ - No visible deformities or lesions. Bilateral canal clear w gray tympanic membranes. - Bilateral sclera white, bilateral cornea clear, no discharge present. Patient wears glasses - Septum is midline, turbinates are pink and moist. Mucus present. - Teeth present, but discolored .
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☐ Edema Y ☐ N ☐** **Location of Edema:**	- S1 and S2 heart sounds heard. No murmurs, gallops, or rubs. - Normal rate and rhythm - Peripheral pulses 2+ throughout bilaterally - - - - Capillary refill less than 3 seconds on fingers and toes bilaterally - No neck vein distention - No edema

RESPIRATORY: **Accessory muscle use: Y☐ N ☐** **Breath Sounds: Location, character**	- No accessory muscle use - Diminished breath sounds anterior/posterior bilaterally - Wheezing present bilaterally
GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☐** **Nasogastric: Y ☐ N ☐** **Size:** **Feeding tubes/PEG tube Y ☐ N ☐** **Type:**	- - Normal mechanical diet, thin liquids - 5’ 2” - 130 lbs - Normoactive bowel sounds in all four quadrants - Most recent bowel movement 10/7/21 at 0700 - Abdomen is soft and nontender. No masses palpated - Appendectomy scar - No ostomy - No enteral feeding tubes -
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☐** **Dialysis: Y ☐ N ☐** **Inspection of genitals:** **Catheter: Y ☐ N ☐** **Type:** **Size:**	 - Unknown - No pain with urination - No dialysis - No catheter
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☐** **Fall Risk: Y ☐ N☐** **Fall Score:**	- Right-handed - No paralysis, general weakness - Independent with use of walker - No ADL assistance - Fall risk - Morse Fall Scale Score: > 51, High risk - Up ad lib

Activity/Mobility Status: **Independent (up ad lib)** ☐ **Needs assistance with equipment** ☐ **Needs support to stand and walk** ☐	- No assistance needed - No support needed to stand and walk
NEUROLOGICAL: **MAEW: Y ☐ N☐** **PERLA: Y ☐ N☐** **Strength Equal: Y ☐ N ☐** **if no - Legs ☐ Arms ☐** **Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	- MAEW: yes - PERRLA: yes - Strength equal: yes - Orient x4 - Alert - Normal - Normal
PSYCHOSOCIAL/ CULTURAL: **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	- Family support - Adult, no developmental disabilities - "Not religious" - Lived at home with her cousin and her grandchildren - Legally adopted her four grandchildren because her daughter/their mother struggles with addiction. The oldest is now a young adult.

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1115	**70 bpm**	**128/74**	**14 rpm**	**97.5 ˚ F** **Temporal**	**95%** **Room Air**

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions

1110	**0**	**N/A**	**N/A**	**N/A**	**N/A**

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
600 mL	**Not Measured** **(No catheterization, Voids Independently)**

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational** • Explain why the nursing diagnosis was chosen	**Intervention (2 per dx)**	**Evaluation** • How did the patient/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Risk for falls related to introduction of new pharmaceutical agent as evidenced by mental status change	The patient recently experienced an episode in which she was found fallen on the floor shortly after receiving day one of chemotherapy.	**1.**Review medication with patient and family. Help patient understand what medications put them at greater risk for falls 2.Provide patient with additional medication for household safety. Refer patient to appropriate resources for safety education.	The patient will continue receiving chemotherapy but is now aware of her increased risk of falls in the days following treatment. Patient and her family will be more mindful of her limitations following chemotherapy and know to contact emergency services if needed.
2. Ineffective	The patient has	1. Teach patient an	The patient agrees these

airway clearance related to smoking as evidenced by diminished breath sounds.	been a smoker for many years and the damage to her lung's cilia has resulted in an inability to clear secretions from the respiratory tract to maintain a clear aiway.	easily performed cough technique to clear airway without fatigue 2. Encourage adequate water intake (3 to 4 L/day) to ensure optimal hydration and loosening of secretions	interventions could be done in addition to the use of the prescribed bronchodilator treatment. Patient will try to drink more water with each meal and throughout the day.

Other References (APA):

Phelps, L.L. (2020). *Sparks and Taylor's Nursing Diagnosis Reference Manual* (11th ed.). Wolters Kluwer.

Concept Map (20 Points)

Subjective Data

Smokes 2-5 cigarettes each day for past 35 years
Does not use drugs or alcohol
No known allergies
Patient fell and was found on the floor and covered in urine. This is out of character for the patient. Patient has experienced short term memory impairment/loss and behavioral changes due to recent radiation. Patient reports no headaches, no nausea or vomiting, no vision changes, no abdominal pain, and no fever and/or chills.

Nursing Diagnosis/Outcomes

Risk for falls related to introduction of new pharmaceutical agent as evidenced by mental status change
The patient will continue receiving chemotherapy but is now aware of her increased risk of falls in the days following treatment. Patient and her family will be more mindful of her limitations following chemotherapy and know to contact emergency services if needed.
Ineffective airway clearance related to smoking as evidenced by diminished breath sounds.
The patient agrees these interventions could be done in addition to the use of the prescribed bronchodilator treatment. Patient will try to drink more water with each meal and throughout the day.

Objective Data

5’ 2”
130 lbs

Pulse: 70 bpm
B/P: 128/74
Respirations: 14

Temp: 97.5

O2 Saturation: 95% on room air
Laboratory Data
Physical Examination Data

Patient Information

B.S.
Female
66 years old
White/Caucasian
Widowed
Retired
Squamous Cell Carcinoma of the Lungs
DNR

Nursing Interventions

.1A. Review medication with patient and family. Help patient understand what medications put them at greater risk for falls 1B. Provide patient with additional medication for household safety. Refer patient to appropriate resources for safety education. .

.2A. Teach patient an easily performed cough technique to clear airway without fatigue 2B. Encourage adequate water intake (3 to 4 L/day) to ensure optimal hydration and loosening of secretions